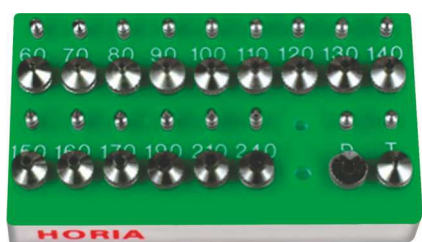


13



UNIVERSAL CORRECTING PRESS

13 - 2

JEWELLING PRESSES

13 - 3

PRESSES FOR RIVETING AND MILLING

13 - 11

STAKING TOOL FOR MILL

13 - 16

INCABLOC® / KIF®

13 - 17

UNIVERSAL CORRECTING PRESS

Universal correcting press.

HOROTEC
SWISS



MSA	Kg
13.010	1.240

Universal correcting press, facilitates the work of milling, drilling, tapping, deburring, chamfering, reaming, etc.
Wide range of tightening chucks P 4.5 type to be mounted on the broach, fine adjustment of the working height.
Large stainless steel work plate and dies adapter.
Compatible with all HOROTEC® screw-on dies.

Contents :

- 1 press
- 1 tip 1° angle MSA13.010-01
- 1 tip 2° angle MSA13.010-02
- 1 tightening chuck P 4.5 type Ø 3 mm MSA03.875-300
- 1 dies adapter MSA13.010-AD
- 1 ring with knurled knob MSA13.010-BA
- 1 broach for tightening chucks P 4.5 type MSA13.010-BR
- 1 Allen key MSA13.010-CL
- 1 stainless steel table Ø 60 mm MSA13.010-TA.

Spare parts :

MSA	Item	Kg
13.010-01	Tip 1° angle	0.002
13.010-02	Tip 2° angle	0.002
13.010-AD	Dies adapter	0.010
13.010-BA	Ring with knurled knob	0.005
13.010-BR	Broach for tightening chucks P 4.5 type	0.020
13.010-CL	Allen key	0.001
13.010-TA	Stainless steel table Ø 60 mm	0.075

Optional tightening chucks for MSA13.010 (other Ø on request).

HOROTEC
SWISS



Ø 4.50 mm

MSA	Ø	Kg
03.875-080	0.80 mm	0.002
03.875-100	1.00 mm	0.002
03.875-150	1.50 mm	0.002
03.875-160	1.60 mm	0.002
03.875-200	2.00 mm	0.002
03.875-235	2.35 mm	0.002
03.875-250	2.50 mm	0.002
03.875-300	3.00 mm	0.002
03.875-400	4.00 mm	0.002

Tightening chuck 4.5 type.



MSA	Kg
13.010-KIT	0.096

Kit for dial feet.

Contents :

- 1x MSA22.558-270 : hard metal end mill , L25 mm, shank Ø 3.00, cutting Ø 2.70 mm
- 1x MSA17.102-B : simple oiler Ø 5 mm, blue, medium needle, L70 mm
- 1x MSA26.587-020 : instant adhesive LOCTITE 435, 20 g
- 1x MSA99.153 : assortment of adhesive dial feet, L3 mm, 60 pieces.

Jewelling presses.



MSA	Ø broach reaming	Ø base reaming	Kg
13.100	3 mm	4 mm	0.600
13.100-4	4 mm	4 mm	0.600

Jewelling press with micrometric screw for rectifying endshakes.

- Opening : 25 mm
- Total height : 120 mm
- Base : 80 x 45 mm
- Table : Ø 20 mm
- Micrometric screw pitch = 1.00 mm / 50 divisions (1 division = 0.02 mm).

Spare part :

MSA	Item
13.101-T	Table Ø 40 mm



MSA	Ø broach reaming	Ø base reaming	Kg
13.102-3	3 mm	4 mm	0.600
13.102-4	4 mm	4 mm	0.600

Special jewelling press with micrometric screw (FINE PITCH) for rectifying endshakes.

- Opening : 25 mm
- Total height : 120 mm
- Base : 80 x 45 mm
- Table : Ø 20 mm
- Micrometric screw pitch = 0.50 mm / 50 divisions (1 division = 0.01 mm).

Spare part :

MSA	Item
13.101-T	Table Ø 40 mm



MSA	Ø broach reaming	Ø base reaming	Kg
13.101	3 mm	4 mm	1.130
13.101-4	4 mm	4 mm	1.130

Jewelling press with lever and micrometric screw for rectifying endshakes, graduation 0.02 mm.

- Opening : 30 mm
- Total height : 125 mm
- Base : 90 x 50 mm
- Table : Ø 23 mm.

Spare parts :

MSA	Item
13.101-C	Broach Ø 3 mm, length 73 mm
13.101-A	Broach Ø 4 mm, length 73 mm
13.101-B	Lever
13.101-T	Table Ø 40 mm



MSA	Ø broach reaming	Ø base reaming	Kg
13.104	6 mm	14 mm	3.260
13.104-12	6 mm	12 mm	3.260

Large model jewelling press with lever and micrometric screw for rectifying endshakes, graduation 0.02 mm.

- Maximum distance between the table and the broach : 50 mm
- Opening : 35 mm
- Total height : 200 mm
- Base length : 140 mm
- Table : Ø 35 mm.

Pushers and stakes for jewellery presses.



ASSORTMENT

MSA	Use	Kg
13.110	With broach Ø 3 mm	0.039
13.110-4	With broach Ø 4 mm	0.039

Assortment no. 1 including 8 pump pushers and 3 stakes.



ASSORTMENT

MSA	Use	Kg
13.111	With broach Ø 3 mm	0.086
13.111-4	With broach Ø 4 mm	0.086

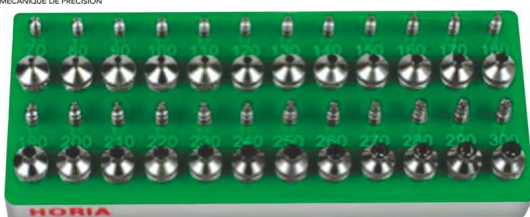
Assortment no. 3 including 12 pump pushers and 6 stakes.



ASSORTMENT

MSA	Use	Kg
13.113	With broach Ø 3 mm	0.124
13.113-4	With broach Ø 4 mm	0.124

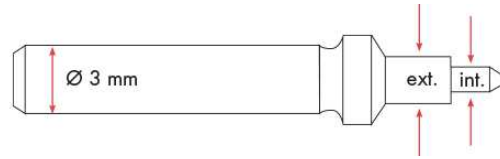
Assortment no. 2 including 15 pump pushers, 15 stakes, 1 set for the pallet-staff and 1 for pushing darts.



ASSORTMENT

MSA	Use	Kg
13.112	With broach Ø 3 mm	0.188
13.112-4	With broach Ø 4 mm	0.188

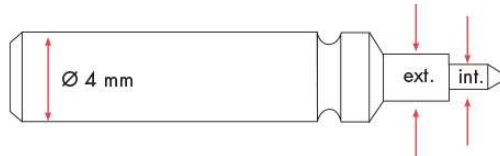
Assortment no. 4 including 24 pump pushers and 24 stakes.



MSA	No. pusher	Internal Ø	External Ø	Kg
13.120-3040	40	0.20 mm	0.40 mm	0.001
13.120-3050	50	0.20 mm	0.50 mm	0.001
13.120-3060	60	0.40 mm	0.55 mm	0.001
13.120-3070	70	0.40 mm	0.65 mm	0.001
13.120-3080	80	0.40 mm	0.75 mm	0.001
13.120-3090	90	0.50 mm	0.85 mm	0.001
13.120-3100	100	0.50 mm	0.95 mm	0.001
13.120-3110	110	0.50 mm	1.05 mm	0.001
13.120-3120	120	0.50 mm	1.15 mm	0.001
13.120-3130	130	0.70 mm	1.25 mm	0.001
13.120-3140	140	0.70 mm	1.35 mm	0.001
13.120-3150	150	0.70 mm	1.45 mm	0.001
13.120-3160	160	0.70 mm	1.55 mm	0.001
13.120-3170	170	0.70 mm	1.65 mm	0.001

MSA	No. pusher	Internal Ø	External Ø	Kg
13.120-3180	180	0.70 mm	1.75 mm	0.001
13.120-3190	190	0.80 mm	1.85 mm	0.001
13.120-3200	200	0.80 mm	1.95 mm	0.001
13.120-3210	210	0.80 mm	2.05 mm	0.001
13.120-3220	220	0.80 mm	2.15 mm	0.001
13.120-3230	230	0.80 mm	2.25 mm	0.001
13.120-3240	240	0.80 mm	2.35 mm	0.001
13.120-3250	250	0.80 mm	2.45 mm	0.001
13.120-3260	260	0.80 mm	2.55 mm	0.001
13.120-3270	270	0.80 mm	2.65 mm	0.001
13.120-3280	280	0.80 mm	2.75 mm	0.001
13.120-3290	290	0.80 mm	2.85 mm	0.001
13.120-3300	300	0.80 mm	2.95 mm	0.001

Pump pushers for Ø 3 mm broaches of presses MSA13.100, MSA13.101 and MSA13.102-3.



MSA	No. pusher	Internal Ø	External Ø	Kg
13.120-4040	40	0.20 mm	0.40 mm	0.001
13.120-4050	50	0.20 mm	0.50 mm	0.001
13.120-4060	60	0.40 mm	0.55 mm	0.001
13.120-4070	70	0.40 mm	0.65 mm	0.001
13.120-4080	80	0.40 mm	0.75 mm	0.001
13.120-4090	90	0.50 mm	0.85 mm	0.001
13.120-4100	100	0.50 mm	0.95 mm	0.001
13.120-4110	110	0.50 mm	1.05 mm	0.001
13.120-4120	120	0.50 mm	1.15 mm	0.001
13.120-4130	130	0.70 mm	1.25 mm	0.001
13.120-4140	140	0.70 mm	1.35 mm	0.001
13.120-4150	150	0.70 mm	1.45 mm	0.001
13.120-4160	160	0.70 mm	1.55 mm	0.001
13.120-4170	170	0.70 mm	1.65 mm	0.001

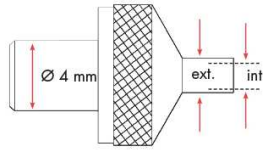
MSA	No. pusher	Internal Ø	External Ø	Kg
13.120-4180	180	0.70 mm	1.75 mm	0.001
13.120-4190	190	0.80 mm	1.85 mm	0.001
13.120-4200	200	0.80 mm	1.95 mm	0.001
13.120-4210	210	0.80 mm	2.05 mm	0.001
13.120-4220	220	0.80 mm	2.15 mm	0.001
13.120-4230	230	0.80 mm	2.25 mm	0.001
13.120-4240	240	0.80 mm	2.35 mm	0.001
13.120-4250	250	0.80 mm	2.45 mm	0.001
13.120-4260	260	0.80 mm	2.55 mm	0.001
13.120-4270	270	0.80 mm	2.65 mm	0.001
13.120-4280	280	0.80 mm	2.75 mm	0.001
13.120-4290	290	0.80 mm	2.85 mm	0.001
13.120-4300	300	0.80 mm	2.95 mm	0.001

Pump pushers for Ø 4 mm broaches of presses MSA13.100-4, MSA13.101-4 and MSA13.102-4.



Spare part :

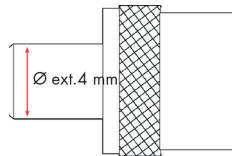
MSA	Item	Kg
13.120-R	Spring for pump pushers MSA13.120-xxxx	0.001



MSA	No. stake	Internal Ø	External Ø	Kg
13.121-050	50	0.60 mm	1.00 mm	0.002
13.121-060	60	0.70 mm	1.40 mm	0.002
13.121-070	70	0.80 mm	1.50 mm	0.002
13.121-080	80	0.90 mm	1.60 mm	0.002
13.121-090	90	1.00 mm	1.80 mm	0.002
13.121-100	100	1.10 mm	1.90 mm	0.002
13.121-110	110	1.20 mm	2.00 mm	0.002
13.121-120	120	1.30 mm	2.10 mm	0.002
13.121-130	130	1.40 mm	2.20 mm	0.002
13.121-140	140	1.50 mm	2.40 mm	0.002
13.121-150	150	1.60 mm	2.50 mm	0.002
13.121-160	160	1.70 mm	2.70 mm	0.002
13.121-170	170	1.80 mm	2.90 mm	0.002

MSA	No. stake	Internal Ø	External Ø	Kg
13.121-180	180	1.90 mm	3.00 mm	0.002
13.121-190	190	2.00 mm	3.20 mm	0.002
13.121-200	200	2.10 mm	3.30 mm	0.002
13.121-210	210	2.20 mm	3.40 mm	0.002
13.121-220	220	2.30 mm	3.50 mm	0.002
13.121-230	230	2.40 mm	3.60 mm	0.002
13.121-240	240	2.50 mm	3.80 mm	0.002
13.121-250	250	2.60 mm	4.00 mm	0.002
13.121-260	260	2.70 mm	4.10 mm	0.002
13.121-270	270	2.80 mm	4.20 mm	0.002
13.121-280	280	2.90 mm	4.30 mm	0.002
13.121-290	290	3.00 mm	4.40 mm	0.002
13.121-300	300	3.10 mm	4.50 mm	0.002

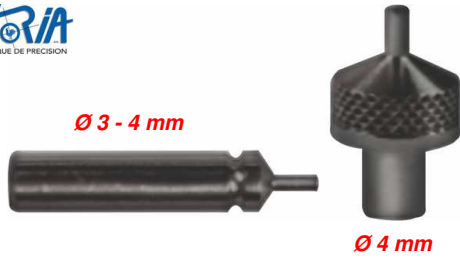
Stakes Ø 4 mm for presses MSA13.100, MSA13.100-4, MSA13.101, MSA13.101-4, MSA13.102-3 and MSA13.102-4.



MSA	No. stake	External Ø	Kg
13.130-070	070	0.70 mm	0.003
13.130-080	080	0.80 mm	0.003
13.130-090	090	0.90 mm	0.003
13.130-100	100	1.00 mm	0.003
13.130-130	130	1.30 mm	0.003
13.130-150	150	1.50 mm	0.003
13.130-190	190	1.90 mm	0.003
13.130-200	200	2.00 mm	0.003

MSA	No. stake	External Ø	Kg
13.130-250	250	2.50 mm	0.003
13.130-300	300	3.00 mm	0.003
13.130-400	**	4.00 mm	0.003
13.130-500	500	5.00 mm	0.003
13.130-600	**	6.00 mm	0.003
13.130-700	700	7.00 mm	0.003
13.130-800	**	8.00 mm	0.003

Special flat stakes.
Other diameters available upon request.



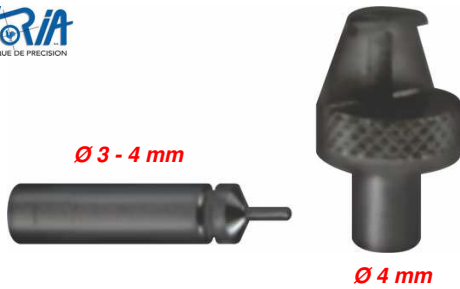
ASSORTMENT

MSA	Use	Kg
13.122	With MSA13.100 + MSA13.101 + MSA13.102-3 (broach Ø 3 mm)	0.002
13.122-4	With MSA13.100-4 + MSA13.101-4 + MSA13.102-4 (broach Ø 4 mm)	0.002

Assortment of 1 pump pusher and 1 stake for pallet-staff.

Spare parts :

MSA	Item	Kg
13.122-P	Pump pusher for broach Ø 3 mm, Ø int.0.2 - Ø ext. 0.8 mm	0.001
13.122-P4	Pump pusher for broach Ø 4 mm, Ø int.0.2 - Ø ext. 0.8 mm	0.001
13.122-T4	Stake Ø 4 mm for pallet-staff, Ø int.0.5 - Ø ext. 0.8 mm	0.002



ASSORTMENT

MSA	Use	Kg
13.123	With MSA13.100 + MSA13.101 + MSA13.102-3 (broach Ø 3 mm)	0.002
13.123-4	With MSA13.100-4 + MSA13.101-4 + MSA13.102-4 (broach Ø 4 mm)	0.002

Assortment of 1 pump pusher and 1 stake for pushing darts.

Spare parts :

MSA	Item	Kg
13.123-P	Pump pusher for broach Ø 3 mm	0.001
13.123-P4	Pump pusher for broach Ø 4 mm	0.001
13.123-T4	Stake Ø 4 mm for pushing darts	0.002



Full pusher for broaches Ø 3 mm.

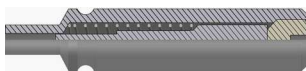
MSA	No.	Ø	Kg	MSA	No.	Ø	Kg	MSA	No.	Ø	Kg
13.124-3015	15	0.15 mm	0.001	13.124-3115	115	1.15 mm	0.001	13.124-3210	210	2.10 mm	0.001
13.124-3020	20	0.20 mm	0.001	13.124-3120	120	1.20 mm	0.001	13.124-3215	215	2.15 mm	0.001
13.124-3025	25	0.25 mm	0.001	13.124-3125	125	1.25 mm	0.001	13.124-3220	220	2.20 mm	0.001
13.124-3030	30	0.30 mm	0.001	13.124-3130	130	1.30 mm	0.001	13.124-3225	225	2.25 mm	0.001
13.124-3035	35	0.35 mm	0.001	13.124-3135	135	1.35 mm	0.001	13.124-3230	230	2.30 mm	0.001
13.124-3040	40	0.40 mm	0.001	13.124-3140	140	1.40 mm	0.001	13.124-3235	235	2.35 mm	0.001
13.124-3045	45	0.45 mm	0.001	13.124-3145	145	1.45 mm	0.001	13.124-3240	240	2.40 mm	0.001
13.124-3050	50	0.50 mm	0.001	13.124-3150	150	1.50 mm	0.001	13.124-3245	245	2.45 mm	0.001
13.124-3055	55	0.55 mm	0.001	13.124-3155	155	1.55 mm	0.001	13.124-3250	250	2.50 mm	0.001
13.124-3060	60	0.60 mm	0.001	13.124-3160	160	1.60 mm	0.001	13.124-3255	255	2.55 mm	0.001
13.124-3065	65	0.65 mm	0.001	13.124-3165	165	1.65 mm	0.001	13.124-3260	260	2.60 mm	0.001
13.124-3070	70	0.70 mm	0.001	13.124-3170	170	1.70 mm	0.001	13.124-3265	265	2.65 mm	0.001
13.124-3075	75	0.75 mm	0.001	13.124-3175	175	1.75 mm	0.001	13.124-3270	270	2.70 mm	0.001
13.124-3080	80	0.80 mm	0.001	13.124-3180	180	1.80 mm	0.001	13.124-3275	275	2.75 mm	0.001
13.124-3085	85	0.85 mm	0.001	13.124-3185	185	1.85 mm	0.001	13.124-3280	280	2.80 mm	0.001
13.124-3090	90	0.90 mm	0.001	13.124-3190	190	1.90 mm	0.001	13.124-3285	285	2.85 mm	0.001
13.124-3095	95	0.95 mm	0.001	13.124-3195	195	1.95 mm	0.001	13.124-3290	290	2.90 mm	0.001
13.124-3100	100	1.00 mm	0.001	13.124-3200	200	2.00 mm	0.001	13.124-3295	295	2.95 mm	0.001
13.124-3105	105	1.05 mm	0.001	13.124-3205	205	2.05 mm	0.001	13.124-3300	300	3.00 mm	0.001
13.124-3110	110	1.10 mm	0.001								



Full pusher for broaches Ø 4 mm.

MSA	No.	Ø	Kg	MSA	No.	Ø	Kg	MSA	No.	Ø	Kg
13.124-4015	15	0.15 mm	0.001	13.124-4145	145	1.45 mm	0.001	13.124-4275	275	2.75 mm	0.001
13.124-4020	20	0.20 mm	0.001	13.124-4150	150	1.50 mm	0.001	13.124-4280	280	2.80 mm	0.001
13.124-4025	25	0.25 mm	0.001	13.124-4155	155	1.55 mm	0.001	13.124-4285	285	2.85 mm	0.001
13.124-4030	30	0.30 mm	0.001	13.124-4160	160	1.60 mm	0.001	13.124-4290	290	2.90 mm	0.001
13.124-4035	35	0.35 mm	0.001	13.124-4165	165	1.65 mm	0.001	13.124-4295	295	2.95 mm	0.001
13.124-4040	40	0.40 mm	0.001	13.124-4170	170	1.70 mm	0.001	13.124-4300	300	3.00 mm	0.001
13.124-4045	45	0.45 mm	0.001	13.124-4175	175	1.75 mm	0.001	13.124-4305	305	3.05 mm	0.001
13.124-4050	50	0.50 mm	0.001	13.124-4180	180	1.80 mm	0.001	13.124-4310	310	3.10 mm	0.001
13.124-4055	55	0.55 mm	0.001	13.124-4185	185	1.85 mm	0.001	13.124-4315	315	3.15 mm	0.001
13.124-4060	60	0.60 mm	0.001	13.124-4190	190	1.90 mm	0.001	13.124-4320	320	3.20 mm	0.001
13.124-4065	65	0.65 mm	0.001	13.124-4195	195	1.95 mm	0.001	13.124-4325	325	3.25 mm	0.001
13.124-4070	70	0.70 mm	0.001	13.124-4200	200	2.00 mm	0.001	13.124-4330	330	3.30 mm	0.001
13.124-4075	75	0.75 mm	0.001	13.124-4205	205	2.05 mm	0.001	13.124-4335	335	3.35 mm	0.001
13.124-4080	80	0.80 mm	0.001	13.124-4210	210	2.10 mm	0.001	13.124-4340	340	3.40 mm	0.001
13.124-4085	85	0.85 mm	0.001	13.124-4215	215	2.15 mm	0.001	13.124-4345	345	3.45 mm	0.001
13.124-4090	90	0.90 mm	0.001	13.124-4220	220	2.20 mm	0.001	13.124-4350	350	3.50 mm	0.001
13.124-4095	95	0.95 mm	0.001	13.124-4225	225	2.25 mm	0.001	13.124-4355	355	3.55 mm	0.001
13.124-4100	100	1.00 mm	0.001	13.124-4230	230	2.30 mm	0.001	13.124-4360	360	3.60 mm	0.001
13.124-4105	105	1.05 mm	0.001	13.124-4235	235	2.35 mm	0.001	13.124-4365	365	3.65 mm	0.001
13.124-4110	110	1.10 mm	0.001	13.124-4240	240	2.40 mm	0.001	13.124-4370	370	3.70 mm	0.001
13.124-4115	115	1.15 mm	0.001	13.124-4245	245	2.45 mm	0.001	13.124-4375	375	3.75 mm	0.001
13.124-4120	120	1.20 mm	0.001	13.124-4250	250	2.50 mm	0.001	13.124-4380	380	3.80 mm	0.001
13.124-4125	125	1.25 mm	0.001	13.124-4255	255	2.55 mm	0.001	13.124-4385	385	3.85 mm	0.001
13.124-4130	130	1.30 mm	0.001	13.124-4260	260	2.60 mm	0.001	13.124-4390	390	3.90 mm	0.001
13.124-4135	135	1.35 mm	0.001	13.124-4265	265	2.65 mm	0.001	13.124-4395	395	3.95 mm	0.001
13.124-4140	140	1.40 mm	0.001	13.124-4270	270	2.70 mm	0.001	13.124-4400	400	4.00 mm	0.001

Pushers for fitting pins.

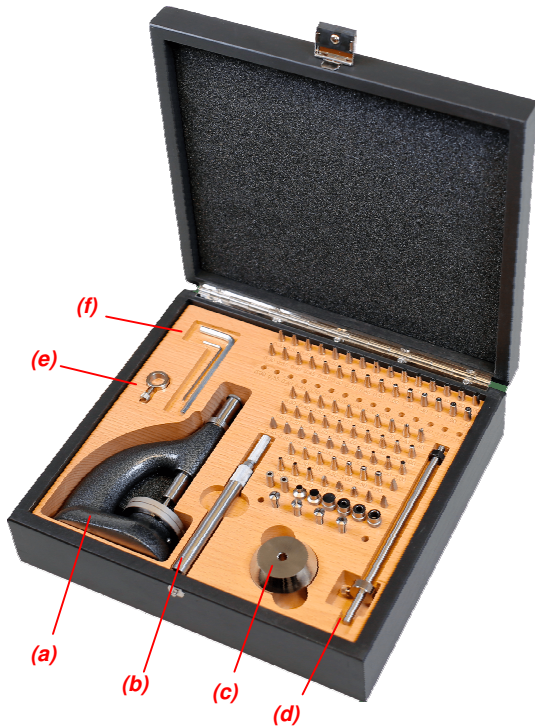


MSA	No. pusher	Internal Ø	External Ø	Kg
13.128-021	021	0.21 mm	0.80 mm	0.001
13.128-031	031	0.31 mm	0.80 mm	0.001
13.128-041	041	0.41 mm	0.90 mm	0.001
13.128-051	051	0.51 mm	1.00 mm	0.001
13.128-061	061	0.61 mm	1.10 mm	0.001
13.128-071	071	0.71 mm	1.20 mm	0.001
13.128-081	081	0.81 mm	1.30 mm	0.001
13.128-091	091	0.91 mm	1.40 mm	0.001
13.128-101	101	1.01 mm	1.50 mm	0.001

Special pusher for fitting pins Ø 3 mm.
Adjustable inner stop to ensure that pins are always fitting at the same height

Maximum fitting length : 3.00 mm.
External length of the pusher tip : 2.70 mm.

Presses for riveting and milling.



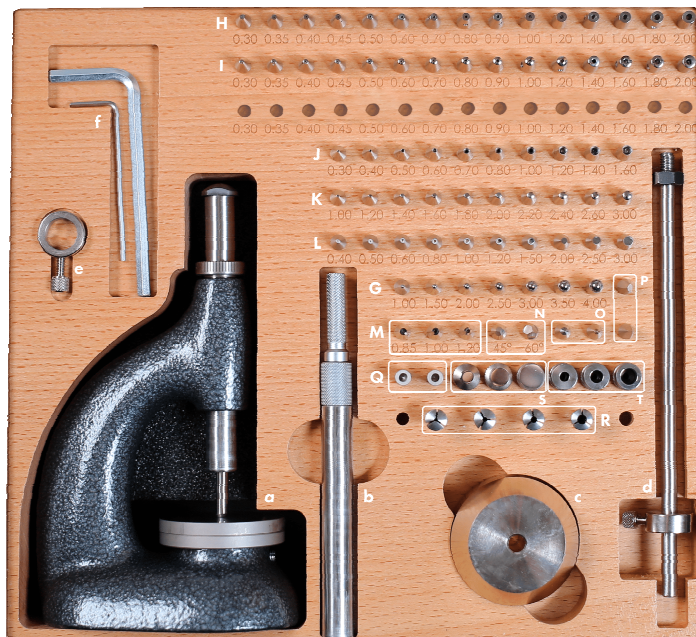
** See details of these components on the following pages

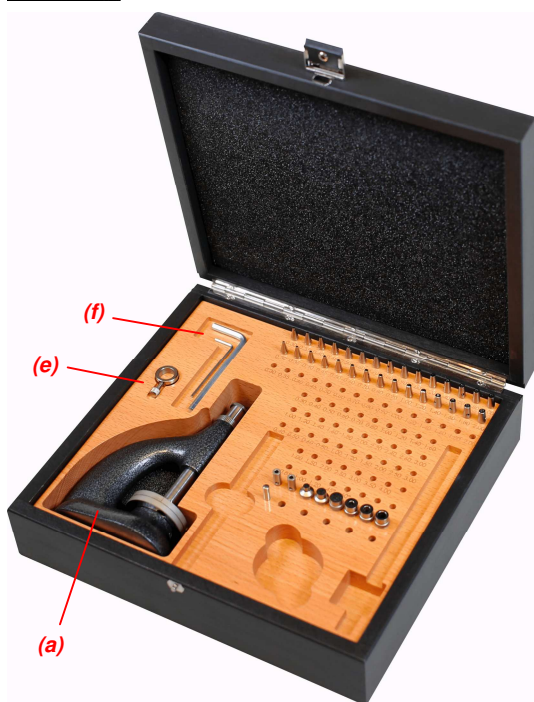
MSA	Box size	Kg
13.210	240 x 220 x 70 mm	2.750

Press for riveting and milling, full version.
Broach and table reaming \varnothing 4 mm.
Delivered in a wooden box.

Contents :

MSA	Item
03.856-x **	(R) ** 4x tightening chuck P4.5 type, \varnothing 1.0 + 1.5 + 2.0 + 3.0 mm
13.129-x	(T) ** 3x flat pierced stake, \varnothing 8 / hole \varnothing 3 + 4 + 5 mm
13.130-x	(S) ** 3x flat stake, \varnothing 4 / \varnothing ext. 4 + 6 + 8 mm
13.210-A	Empty box
13.210-B	(a) Press with table + broach + screw, anthracite
13.210-C	(b) Milling broach, for chucks P4.5, \varnothing ext. 10 x L113.50 mm
13.210-D	(c) Weight for rod, \varnothing 40 x 25 mm
13.210-E	(d) Rod for use with MSA13.210-C spindle and MSA13.210-D weight
13.210-F	Locknut for shank, \varnothing 15 / \varnothing 5 x 5 mm
13.210-G	(e) Locknut for broach, \varnothing 15 / \varnothing 10 x 5 mm
13.210-H15	(f) L Allen wrench, 1.50 mm
13.210-H40	(f) L Allen wrench, 4.00 mm
13.220-x	(G) ** 7x riveting punch, ball / \varnothing 1.00 ... 4.00 mm
13.221-x	(H) ** 15x riveting punch, domed pierced / hole \varnothing 0.30 ... 2.00 mm
13.222-x	(I) ** 15x riveting punch, flat pierced / hole \varnothing 0.30 ... 2.00 mm
13.223-x	(J) ** 10x riveting punch, concave, pierced / hole \varnothing 0.30 ... 1.60 mm
13.224-x	(K) ** 10x riveting punch, cylindrical domed / \varnothing 1.00 ... 3.00 mm
13.225-x	(L) ** 10x riveting punch, cylindrical flat / \varnothing 0.40 ... 3.00 mm
13.226-x	(M) ** 3x riveting punch, flat pierced ellipse / hole \varnothing 0.85 ... 1.20 mm
13.227-x	(N) ** 2x riveting punch, conical 45° + 60° / \varnothing 1.80 + 2.00 mm
13.228-x	(O) ** 2x conical milling point 40° + 60°
13.229-021	(P) ** Pair of lanterning punches 30°, No. 21
13.230-04	** Cylindrical pin, \varnothing 4 x L24 mm
13.230-H1	(Q) ** Reamer holder, No. H1 / \varnothing 5 x L16 mm / 2°
13.230-H2	(Q) ** Wheel countersink holder, No. H2 / \varnothing 5 x L16 mm / 1°





MSA	Box size	Kg
13.211	240 x 220 x 70 mm	2.315

Riveting press, light version.
Broach and table reaming Ø 4 mm.

Delivered in a wooden box.

Contents :

MSA	Item
13.129-x	(T) ** 3x flat pierced stake, Ø 8 / hole Ø 3 + 4 + 5 mm
13.130-x	(S) ** 3x flat stake, Ø 4 / Ø ext. 4 + 6 + 8 mm
13.210-A	Empty box
13.210-B	(a) Press with table + broach + screw, anthracite
13.210-G	(e) Locknut for broach, Ø 15 / Ø 10 x 5 mm
13.210-H15	(f) L Allen wrench, 1.50 mm
13.210-H40	(f) L Allen wrench, 4.00 mm
13.221-x	(H) ** 15x riveting punch, domed pierced / hole Ø 0.30 ... 2.00 mm
13.222-x	(I) ** 15x riveting punch, flat pierced / hole Ø 0.30 ... 2.00 mm
13.230-04	** Cylindrical pin, Ø 4 x L24 mm
13.230-H1	(Q) ** Reamer holder, No. H1 / Ø 5 x L16 mm / 2°
13.230-H2	(Q) ** Wheel countersink holder, No. H2 / Ø 5 x L16 mm / 1°

** See details of these components on the following pages

Riveting punches, with ball (delivered with the full version MSA13.210).



MSA	No.	Ø
13.220-100	100	1.00 mm
13.220-150	150	1.50 mm
13.220-200	200	2.00 mm
13.220-250	250	2.50 mm

MSA	No.	Ø
13.220-300	300	3.00 mm
13.220-350	350	3.50 mm
13.220-400	400	4.00 mm

Riveting punches, domed pierced (delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No.	Ø	Ø hole
13.221-030	30	1.50 mm	0.30 mm
13.221-035	35	1.60 mm	0.35 mm
13.221-040	40	1.70 mm	0.40 mm
13.221-045	45	1.80 mm	0.45 mm
13.221-050	50	1.90 mm	0.50 mm
13.221-060	60	2.10 mm	0.60 mm
13.221-070	70	2.30 mm	0.70 mm
13.221-080	80	2.50 mm	0.80 mm

MSA	No.	Ø	Ø hole
13.221-090	90	2.70 mm	0.90 mm
13.221-100	100	3.00 mm	1.00 mm
13.221-120	120	3.30 mm	1.20 mm
13.221-140	140	3.50 mm	1.40 mm
13.221-160	160	3.70 mm	1.60 mm
13.221-180	180	3.90 mm	1.80 mm
13.221-200	200	4.10 mm	2.00 mm

Riveting punches, flat pierced (delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No.	Ø	Ø hole
13.222-030	30	1.50 mm	0.30 mm
13.222-035	35	1.60 mm	0.35 mm
13.222-040	40	1.70 mm	0.40 mm
13.222-045	45	1.80 mm	0.45 mm
13.222-050	50	1.90 mm	0.50 mm
13.222-060	60	2.10 mm	0.60 mm
13.222-070	70	2.30 mm	0.70 mm
13.222-080	80	2.50 mm	0.80 mm

MSA	No.	Ø	Ø hole
13.222-090	90	2.70 mm	0.90 mm
13.222-100	100	3.00 mm	1.00 mm
13.222-120	120	3.30 mm	1.20 mm
13.222-140	140	3.50 mm	1.40 mm
13.222-160	160	3.70 mm	1.60 mm
13.222-180	180	3.90 mm	1.80 mm
13.222-200	200	4.10 mm	2.00 mm

Riveting punches, concave pierced (delivered with the full version MSA13.210).



MSA	No.	Ø	Ø hole
13.223-030	30	0.70 mm	0.30 mm
13.223-040	40	0.90 mm	0.40 mm
13.223-050	50	1.30 mm	0.50 mm
13.223-060	60	1.60 mm	0.60 mm
13.223-070	70	2.00 mm	0.70 mm

MSA	No.	Ø	Ø hole
13.223-080	80	2.10 mm	0.80 mm
13.223-100	100	2.50 mm	1.00 mm
13.223-120	120	2.70 mm	1.20 mm
13.223-140	140	3.00 mm	1.40 mm
13.223-160	160	3.10 mm	1.60 mm

Riveting punches, cylindrical domed (delivered with the full version MSA13.210).



MSA	No.	Ø
13.224-100	100	1.00 mm
13.224-120	120	1.20 mm
13.224-140	140	1.40 mm
13.224-160	160	1.60 mm
13.224-180	180	1.80 mm

MSA	No.	Ø
13.224-200	200	2.00 mm
13.224-220	220	2.20 mm
13.224-240	240	2.40 mm
13.224-260	260	2.60 mm
13.224-300	300	3.00 mm

Riveting punches, cylindrical flat (delivered with the full version MSA13.210).



MSA	No.	Ø
13.225-040	40	0.40 mm
13.225-050	50	0.50 mm
13.225-060	60	0.60 mm
13.225-080	80	0.80 mm
13.225-100	100	1.00 mm

MSA	No.	Ø
13.225-120	120	1.20 mm
13.225-150	150	1.50 mm
13.225-200	200	2.00 mm
13.225-250	250	2.50 mm
13.225-300	300	3.00 mm

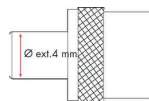
Riveting punches, flat pierced and ellipse (delivered with the full version MSA13.210).



MSA	No.	Ø	Ø hole
13.226-085	85	2.20 mm	0.85 mm
13.226-100	100	2.30 mm	1.00 mm

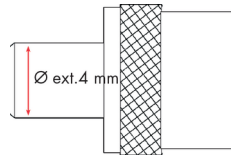
MSA	No.	Ø	Ø hole
13.226-120	120	2.50 mm	1.20 mm

Flat pierced stakes (delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No.	Ø	Ø hole
13.129-300	300	8.00 mm	3.00 mm
13.129-400	400	8.00 mm	4.00 mm
13.129-500	500	8.00 mm	5.00 mm

Flat stakes (** delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No. stake	External Ø	Kg
13.130-070	070	0.70 mm	0.003
13.130-080	080	0.80 mm	0.003
13.130-090	090	0.90 mm	0.003
13.130-100	100	1.00 mm	0.003
13.130-130	130	1.30 mm	0.003
13.130-150	150	1.50 mm	0.003
13.130-190	190	1.90 mm	0.003
13.130-200	200	2.00 mm	0.003

MSA	No. stake	External Ø	Kg
13.130-250	250	2.50 mm	0.003
13.130-300	300	3.00 mm	0.003
13.130-400	**	4.00 mm	0.003
13.130-500	500	5.00 mm	0.003
13.130-600	**	6.00 mm	0.003
13.130-700	700	7.00 mm	0.003
13.130-800	**	8.00 mm	0.003

Special flat stakes.
Other diameters available upon request.

SCHAUBLIN chucks P4.5 type (delivered with the full version MSA13.210).



Ø 4.50 mm

MSA	Ø	Kg
03.856-100	1.00 mm	0.002
03.856-150	1.50 mm	0.002
03.856-200	2.00 mm	0.002
03.856-300	3.00 mm	0.002

Horotec® Chucks P 4.5 type.



Ø 4.50 mm

MSA	Ø	Kg
03.875-080	0.80 mm	0.002
03.875-100	1.00 mm	0.002
03.875-150	1.50 mm	0.002
03.875-160	1.60 mm	0.002
03.875-200	2.00 mm	0.002
03.875-235	2.35 mm	0.002
03.875-250	2.50 mm	0.002
03.875-300	3.00 mm	0.002
03.875-400	4.00 mm	0.002

Tightening chuck 4.5 type.

Other accessories for riveting and milling presses MSA13.210 and MSA13.211 :



(1)



(2)



(3)



(4)

MSA	Item
13.227-045 *	(1) Riveting punch with conical point, No. 45 / Ø 1.80 mm / 45°
13.227-060 *	Riveting punch with conical point, No. 60 / Ø 2.00 mm / 60°
13.228-045 *	Conical milling point, No. 45 / 40°
13.228-060 *	(2) Conical milling point, No. 60 / 60°
13.229-021 *	(3) Pair of lanterning punches, No. 21 / 30°
13.230-04 **	Cylindrical pin, Ø 4 x L24 mm
13.230-H1 **	(4) Reamer holder, No. H1 / Ø 5 x L16 mm / 2°
13.230-H2 **	Wheel countersink holder, No. H2 / Ø 5 x L16 mm / 1°

* Delivered with press MSA13.210 (full version)

** Delivered with presses MSA13.210 (full version) and MSA13.211 (light version)

STAKING TOOL FOR MILL



MSA	Ø base reaming	Kg
13.105	4 mm	3.260

Staking tool for mill with 1 table and 1 broach for chuck P4.5 (chuck not included).

- Maximum distance between table and broach : 35 mm
- Opening : 28 mm
- Total height without broach : 110 mm
- Base length : 85 mm
- Table size : 80 x 50 mm
- Broach : Ø 8 mm.

Accessories for MSA13.105 (other Ø on request).



Ø 4.50 mm

MSA	Ø	Kg
03.875-080	0.80 mm	0.002
03.875-100	1.00 mm	0.002
03.875-150	1.50 mm	0.002
03.875-160	1.60 mm	0.002
03.875-200	2.00 mm	0.002
03.875-235	2.35 mm	0.002
03.875-250	2.50 mm	0.002
03.875-300	3.00 mm	0.002
03.875-400	4.00 mm	0.002

Tightening chuck 4.5 type.

INCABLOC® assortments.



ASSORTMENT

MSA	Packaging size	Kg
13.153	70 x 34 x 20 mm	0.031

Assortment INCABLOC®. The 6 pushers and the 7 stakes have a Ø 4 mm axle and are compatible with the presses MSA13.100-4, MSA13.101-4 and MSA13.102-4 illustrated on pages 13-3 and 13-4.

Contents (pushers) :	Contents (stakes) :
- Ø ext. 1.60 mm, Ø hole 1.20 mm	- Ø ext. 1.60 mm, Ø hole 1.20 mm
- Ø ext. 1.90 mm, Ø hole 1.40 mm	- Ø ext. 2.00 mm, Ø hole 1.60 mm
- Ø ext. 2.00 mm, Ø hole 1.60 mm	- Ø ext. 2.30 mm, Ø hole 1.90 mm
- Ø ext. 2.50 mm, Ø hole 1.90 mm	- Ø ext. 2.50 mm, Ø hole 2.00 mm
- Ø ext. 3.00 mm, Ø hole 2.40 mm	- Ø ext. 3.00 mm, Ø hole 2.50 mm
- Ø ext. 3.50 mm, Ø hole 2.80 mm	- Ø ext. 3.50 mm, Ø hole 3.00 mm
	- Ø ext. 4.00 mm, Ø trou 3.50 mm



ASSORTMENT

MSA	Packaging size	Kg
13.154	90 x 65 x 25 mm	0.110

Assortment INCABLOC®. The 6 pushers and 7 stakes have a Ø 3 mm axle and are compatible with the presses MSA13.100, MSA13.101 and MSA13.102-3 illustrated on pages 13-3 and 13-4.

Contents (pushers) :	Contents (stakes) :
- Ø ext. 1.57 mm, Ø hole 0.80 mm	- Ø ext. 1.65 mm, Ø hole 1.35 mm
- Ø ext. 1.87 mm, Ø hole 1.50 mm	- Ø ext. 2.00 mm, Ø hole 1.60 mm
- Ø ext. 2.07 mm, Ø hole 1.70 mm	- Ø ext. 2.30 mm, Ø hole 1.90 mm
- Ø ext. 2.47 mm, Ø hole 2.00 mm	- Ø ext. 2.50 mm, Ø hole 2.10 mm
- Ø ext. 2.97 mm, Ø hole 2.50 mm	- Ø ext. 3.00 mm, Ø hole 2.50 mm
- Ø ext. 3.47 mm, Ø hole 3.00 mm.	- Ø ext. 3.50 mm, Ø hole 3.00 mm
	- Ø ext. 4.00 mm, Ø trou 3.50 mm.

KIF® spring-twister tools.



MSA	Packaging size	Kg
13.155	50 x 30 x 6 mm	0.004

KIF® shock absorber with non-attached spring. The non-attached spring of KIF 1 (Trior) is locked by rotation. In order to simplify operations for the watch repair during assembly or dismounting, KIF-PARECHOC® have designed a small tool known as "spring-twister".
Delivered in a small plastic box containing 3 spring-twister for fitting diameters 1.60, 1.90 and 2.10 mm.

Spare parts :

MSA	Item	Kg
13.150	Spring-twister KIF® 160, size Ø 2 x length 25 mm	0.001
13.151	Spring-twister KIF® 190, size Ø 2 x length 25 mm	0.001
13.152	Spring-twister KIF® 210, size Ø 2 x length 25 mm	0.001

